

Tihana Brkljačić

Institute of Social Sciences Dr. Ivo Pilar

Ines Sučić

Catholic University of Croatia

Barbara Brdovčak

Catholic University of Croatia

Serious leisure activities and well-being of senior citizens: Case of contract bridge

Aktywny wypoczynek a wyższa jakość życia seniorów
na przykładzie brydża sportowego

Streszczenie. Sporty umysłowe, takie jak szachy, go czy brydż sportowy są przydatne dla osób starszych, które pragną uczestniczyć w prawdziwych zawodach sportowych, chcą spotykać innych ludzi oraz utrzymywać funkcje poznawcze na dobrym poziomie. Stebbins (1992) wprowadził termin „aktywny wypoczynek” opisujący zaangażowanie w czasie wolnym w aktywne formy wypoczynku jako przeciwieństwo „pasywnego wypoczynku”, jak np. oglądanie telewizji. Major (2001) zidentyfikował trzy podstawowe zalety aktywnego wypoczynku: poczucie spełnienia (np. wzrost pewności siebie, siły czy autokontroli), zdrowie i sprawność fizyczna (np. wzrost tężyzny fizycznej i ograniczenie stresu) oraz akceptacja społeczna. Celem tego opracowania jest wykazanie zalet uprawiania brydża sportowego przez osoby starsze i analiza gry uwzględniająca klasyfikację Majora.

Przeprowadziliśmy wywiady z 8 brydżystami powyżej 65. roku życia grającym na co dzień w klubie w Zagrzebiu. Wywiady były przeprowadzane na żywo i nagrywane. Uczestnikami były i kobiety, i mężczyźni grający regularnie w naszym klubie od ponad pięciu lat.

Wszyscy uczestnicy potwierdzili, że brydż znacząco podniósł standard ich życia. Brydż wspomógł ich jakość życia poprzez wzrost akceptacji społecznej (komunikacja z ludźmi w różnym wieku, spotkanie nowych przyjaciół, wzrost społecznego wsparcia, uznania i statusu oraz wychodzenie z domu), poprzez uwidocznienia odczucia spełnienia (uczenie się, rozwiązywanie problemów, rywalizacja, rozwój i wygrywanie), poprzez poprawę sprawności umysłowej (bycie w dobrej formie intelektualnej), udowadniając zalety aktywnego wypoczynku przedstawione przez Majora w 2001. Dodatkowo uczestnicy, którzy przeszli na emeryturę argumentowali, że gra w brydża pomogła im dużo lepiej znieść uciążliwości tego okresu przejściowego poprzez wprowadzenie nowej stabilizacji i wypełnienie pustki czasowej związanej z emeryturą.

Podsumowując nasze badania naukowe stwierdzamy, że brydż sportowy ma wielką siłę jako mechanizm obronny dla seniorów podnosząc ich akceptację społeczną, wspomagając sprawność umysłową oraz wprowadzając pozytywne elementy rywalizacji.

Słowa kluczowe: aktywny wypoczynek, sport umysłowy, brydż sportowy, wyższa jakość życia, motywacja, seniorzy, osoby starsze, badania naukowe

Summary. Mind sports such as chess, go and contract bridge are extremely suitable for elderly people who want to engage into a real competition, make social contacts and maintain sharp cognitive performances. Stebbins (1992) introduced a term “serious leisure” to describe active leisure engagement with commitment and dedication, as opposed to “passive leisure” such as watching TV. Major (2001) identified three major types of benefits of serious leisure activities: sense of accomplishment (i.e., self-confidence, power, and control), health and fitness (i.e., physical benefits and stress relief), and social affiliation. The aim of this study was to explore motivation of senior citizens to engage in contract bridge, and to analyse self-reported benefits of the game regarding Major’s classification.

We conducted eight semi-structured interviews with senior bridge players (over 65) in Zagreb bridge clubs. Interviews were conducted in face-to-face manner, and they were all audio recorded. Sample consisted of both male and female players who played bridge regularly in clubs for over five years.

All participants confirmed that bridge significantly improved quality of their lives. Bridge contributed to their well-being by advancing social affiliation (communicating with people of all ages, finding new friends, getting social support, recognition and status, and going out of home), enhancing sense of accomplishment (learning, solving problems, competing, advancing, and winning), and mental fitness (staying intellectually fit), confirming benefits proposed by Major (2001) serious leisure model. Additionally, retired participants argued that bridge helped them in the transition period, providing basis for time structure and remaining the stable and fulfilling part of their lives.

Findings of this research strongly suggest that contract bridge has power to work as a protective mechanism in seniors, due to its social, cognitive, and competitive benefits.

Keywords: serious leisure; mind sports; contract bridge; well-being; quality of life; motivation; senior citizens; qualitative research

Well-being of elderly

Most scholars in the field of positive psychology define subjective well-being in terms of frequent positive affect – defined by as pleasant mood and emotions; infrequent negative affect – defined as unpleasant mood and emotions; and high life satisfaction – individual’s appraisal of life as a whole (Diener, 2006).

Although older age is related to declined health and physical abilities, and various psycho-social losses, most research didn't find lower well-being among older population. Diener and Suh (1997) presented a review of cross-sectional data of 60 000 persons from 63 countries and found that well-being is relatively stable across age groups in most societies. Moreover, Blanchflower and Oswald (2008), for participants from 60 countries, found U-shaped relationship between life satisfaction and age, with lowest point between 35 and 50 years.

Social relations and social engagement are known to greatly contribute to ones well-being (e.g. Jang, Mortimer, Haley, & Graves, 2004). Even more, social relationships are positively associated with health status across the life span (e.g. Cohen, 2004). With retirement, people often loose some social connections they previously maintained because of work, and additionally social ties may weaken because of health related problems that are more frequent among elderly. Furthermore, due to the retirement, people may feel less productive and consequently their sense of self-accomplishment or self-esteem may be jeopardized. Quite controversy, people look forward to retirement mostly because they hope to have lot of free time to do whatever they want, but once retired they sometimes lack structured activities. Indeed, evidence concerning relationship between retirement and well-being has been inconsistent, and it seems that this relationship is under influence of various factors and their interactions.

Leisure activities

Leisure activities can be defined as preferred and enjoyable activities participated in during one's free time (Kleiber & Nimrod, 2009). Leisure activities are by no means restricted to seniors, but since they usually have more free time, it is very important how to organize it in order to advance well-being. By definition, the choice of leisure activities should be determined by one's own preferences. Therefore, Kelly (1996) claims that leisure time activities are characterized as representing freedom and providing intrinsic satisfaction. It is well known that leisure activities contribute significantly to the quality of one's life (e.g. Yarnal, Chick, & Kerstetter, 2008; Newman, Tay, & Diener, 2014). It is well known that leisure participation have a close association with life satisfaction and well-being (Blace, 2012; Nilsson & Fisher, 2006).

After retirement, elderly citizens usually have more free time than other adults and therefore it is extremely important to explore possibilities of engaging seniors into various activities that would contribute to their well-

being. Therefore, leisure time activities have emerged as the most important target for lifestyle changes among older adults because of the potentially beneficial effect on various health outcomes.

Older adults may choose among different activities to spend their leisure time. Medical doctors encourage seniors to engage in various physical activities (e.g., fitness, walking, dance, yoga) in order to stay fit, advance health and reduce deterioration processes. For example, Juan (2009) argued that leisure activities improve health by promoting blood circulation and serve as protective factor against some diseases. Although physical activities have undoubtable beneficial effects, mental activities are important as well, especially if those are able to decrease risk of dementia and similar age-related diseases. For instance, Verghese, Wang, Katz, Sanders, and Lipton (2009) have found that cognitive leisure activity is related to reduced risk of vascular cognitive impairment. Moreover, seniors are often attracted to intellectual, rather than physical activities, probably due to lessen physical strength, and health problems that prevent them from (some) physical activity. Some of the typical activities are watching TV, reading, solving crosswords and other puzzles. Paillard-Borg, Wang, Winblad, and Fratiglioni (2009) found that mental activities (e.g., writing, reading) were the most popular leisure activities among older adults and also enhanced well-being the most. Generally, more involving and challenging (e.g., solving puzzles) activities are better for cognitive health than passive (e.g., watching TV) ones. However, all above mentioned activities are solitary, and although they are useful for keeping mentally fit, they lack benefits of social contact. Silverstein and Parker (2002) found that engaging in friendship-type leisure activities (e.g., visiting friends) resulted in the highest quality of life in older adults, while Adams, Leibbrandt, and Moon (2011), analysing results of previous research, concluded that informal social activity (e.g., going to clubs) benefited well-being the most. Some seniors engage in various social activities (e.g., Bingo games, visiting friends, going to church) that provide social affiliation, but on the other hand, those are often rather intellectually undemanding.

Playing games with others is an activity that is both intellectually challenging and provides social contact. There are not many research on effects of playing games on seniors' well-being, and most deal with playing digital games. For example, Jung, Li, Janissa, Gladys, and Lee (2009) showed that playing Nintendo Wii games had a positive impact on the overall well-being of the elderly, compared to a control group that played traditional board games.

Desire to play

Caillois (1961) defines game as an activity that is voluntary and enjoyable, governed by rules, separate from the real world, uncertain and unproductive in that the activity does not produce any goods of external value. Need to play is amongst essential needs of living beings, as it naturally arises in the early childhood. Although play is not physiologically driven such as hunger or thirst, it can be observed among many life forms, where games are widely used training for “real life” and exploring the environment. Playing games enables people to spend time together in entertaining activity, as both adults and children enjoy exciting and relaxing effects provided by playing. Games can be a strong facilitator of family interactions and communication.

Interestingly, some recent authors argue, that as negative emotions produce specific urges (e.g., fear elicits urge to escape, anger elicits urge to fight), joy creates the urge to play and to be playful in the broadest sense of the word, encompassing not only physical and social play, but also intellectual and artistic play (Fredrickson, 2000).

Learning and playing mind stimulating games may have beneficial effects on well-being of seniors (Ashworth, Punch, & Small, 2016). There are various types of mind games, but here we are concerned with contract bridge since we believe it is (a) extremely suitable for intellectual stimulation; (b) very competitive and challenging; (c) very sociable, since unlike other mind sports it is played in partnerships.

Contract bridge

Contract bridge (bridge) is a trick-taking probability based strategy card game, played with 52-card deck. Single deal is played by two competing partnerships, with partners sitting opposite each other. Partners are interdependent and have to work closely together to achieve the best result.

The game of bridge has two phases: the *Bidding* and the *Play*¹. As soon as cards are dealt (each player gets 13 cards) the bidding starts. During the bidding, partners use coded signals to communicate information about their cards, including overall strength and the length of its suits. The purpose of the bidding is to specify the contract. Contract includes information on how many tricks they approximate to take, and whether there will be a trump suit (and if so, which one) or not. Once the final contract is agreed, the play starts. The purpose of the play is to take at least as many tricks as

¹ For more information about Contract Bridge please consult: World Bridge Federation web-site: http://www.acbl.org/learn_page/how-to-play-bridge/

promised by the contract, while the opposing partnership is trying to prevent opponents from achieving its goal.

Bridge is very competitive, dynamic game that can be played at both social and tournament level. Almost every bigger European city has bridge clubs, where tournaments are regularly held. Entry fee is usually symbolic so it is quite affordable. However, unlike other mind sports, which are easy to learn but difficult to master, bridge is also difficult to learn and it usually takes few months just to learn the basis.

Serious leisure

According to Newman et al. (2014) leisure is a key life domain and a core ingredient for overall well-being. They distinguished between five factors related to leisure activities, which may contribute to subjective well-being: detachment-recovery, autonomy, mastery, meaning, and affiliation (DRAM-MA). Stebbins (1992) introduced a term “serious leisure” to describe active leisure engagement with commitment and dedication, as opposed to passive leisure such as watching TV. Main types of serious leisure are: the amateur, hobbyist, and career volunteer (Stebbins, 2002).

Major (2001) identified three major types of benefits of serious leisure: sense of accomplishment (i.e., self-confidence, power, and control), health and fitness (i.e., physical benefits and stress relief), and social affiliation. Although Major’s (2001) benefits are result of qualitative research conducted on runners, we believe that playing bridge may have similar effects. Bridge, as a leisure time activity, should contribute to individuals’ well-being by boosting sense of accomplishment (learning, solving problems, winning), mental fitness (staying intellectually fit), and social affiliation (meeting friends in a bridge club, playing with partner). Since bridge is not a physical activity, it is unlikely that it would improve physical fitness, but it is known that engagement in mind games might slow down deterioration of mental functioning. For example, Coyle (2003) reported decreased risk of Alzheimer’s disease in persons engaged in mind-involving activities including chess, Peel (2014) who argued that mental activities, such as bridge, can reduce the risk of dementia, and Diamond, Weidner, Schow, Grell, and Everett (2001), who found evidence that playing bridge contributes to the immune system.

Specific aims of this study were:

- to explore self-reported motivation of senior citizens to engage in contract bridge and

- to analyze self-reported benefits of the game regarding Major's classification.

Method

In this research we employed qualitative approach, since we were interested in comprehensive analysis of a particular phenomenon (thoughts and experiences of elderly related to playing bridge) that was not studied in details before. This approach allowed the respondents to talk freely, in depth, providing their own perspectives and choosing their own words. This procedure enabled us to develop a real sense of a person's understanding of a situation.

Sample

Study was conducted with eight participants in the age range 68 to 80, five women and three men. After those eight interviews, we conducted an additional one, but no new information was obtained. Participation was voluntary, and all approached players were willing to join the research. Indeed, they were very enthusiastic about it, and quite interested in the results.

All participants played bridge at least once per week, and they all played for minimum eight years.

From our participants six were married or in a relationship and two were single, seven had university degree, and during their working life, they were all specialists in a field. At the time of interview, they were all retired, but some of them still did some part time job by contract. Although all reported several health problems (e.g., high blood pressure, cholesterol, pain in the back or similar), one of the participants reported partial invalidity.

Procedure

Interviews were conducted in a local bridge club, in a face-to-face manner, in an informal, pleasant atmosphere. Interviewer was experienced researcher, and advanced bridge player. All participants knew interviewer personally for few years or longer. Each interview took about 30 minutes. Interviews were audio-recorded and transcribed later. Participants were informed about the purpose of the study, and they gave permission to the researcher to use their answers for scientific purposes.

The following semi-structured interview was conducted (*Table 1*). The interview consisted of two main parts, opening and closure (in italic in the table). Each main part had a first level question and additional questions

that were asked if participant didn't already include them in the answer to the first level question. Some supplementary questions (mostly asking for explanation and elaboration) were asked occasionally, directly depending on interviewees responses.

Table 1. Interview structure

<i>Opening</i>
Tell me something about yourself
Age
Health
Social life
Work and hobbies
When did you start to play bridge?
<i>Motives to play bridge</i>
What attracted you to bridge?
Why did you decide to take bridge?
Why did you decide to continue to play bridge?
What do you find in bridge?
How important part of your life is it?
How would your life look like if there was no bridge?
<i>Benefits from playing</i>
Does bridge influence the quality of your life? (If yes, in what way?)
Are there any specific benefits from playing bridge? (If yes, which one?)
How bridge fits into your daily/weekly activities?
Did anything changed regarding your bridge since you were retired?
Would you suggest other senior citizens to play bridge? (Why, why not?)
<i>Closure</i>
Would you like to add something?

Source: own research

Findings and discussion

We conducted categorization content analysis that enables data reduction by means of coding and thematic organization. We used a hybrid method of data coding including pre-set (*a priori*) codes derived primarily from existing theoretical frameworks of leisure and well-being (Major's classification).

However, coding set was also open for new codes to emerge from participants' responses during coding procedure.

Motivation to play bridge

Most of the participants started to play bridge in their earlier age, and two started only after they were retired. All participants claimed that they wanted to learn bridge for some time (some even for years) before they actually took classes. *"I've heard that there were those people who play cards seriously in clubs. It seemed strange, but interesting, at that point of time. For me, card games were something to be played informally with friends, at home. But I think even then I was intrigued a bit."*

Therefore it seems that motivation to involve in bridge slowly developed across longer period of time, as a result of general interest in mind puzzles and games. For some of the participants motivation was clear: *"I love all mind challenges"* or *"I love all types of games"*, while for some was quite vague: *"First time I entered the club, well it was maybe, forty years ago, the atmosphere, it was so fascinating, luxury, well not luxury like diamonds and gold, but like in movies, you know, all these serious people (...) and green table-cloths, well I was fascinated. Sounds funny, doesn't it?"*

Some of the participants got the chance to take bridge only after they retired: *"I wanted to start to play (bridge) earlier, but there was always something else. Then, after I retired I finally had enough time. I am really glad that I decided to take bridge and not something else."* Indeed, since bridge is quite involving activity that occupies a lot of persons' time, retirement is good time to either learn it: *"Yes, it was difficult, but I liked it from the first day. I could see that I am getting better every week, so that made me continue."*, or to get more involved into it: *"I started to play when I was quite young, but during my middle age I kind of neglected it... you know... work, family, all things you have to do... then, when I retired I told to myself, now I can play as much as I like (...) and I do."*

For all of our participants, bridge was very important part of life. For some of the participants bridge was integrated in their lives for years: *"I was quite young when I started. I might be among those who are here for the longest time. (...) Except for my family, only here I can find people who I know all my life."*

Although all had satisfying social life outside bridge, and although most of them had other hobbies, bridge was their most serious leisure activity. Their other hobbies were mostly intellectual and passive, like reading, watching TV, solving puzzles: *"I read a lot. Mostly newspapers, and things like*

that. I don't enjoy yellow-print. I want to stay informed, to know what is going on in the country and in the world."

They all agreed that bridge was "something else": *"I think I knew it from beginning (that bridge will be her main interest). It was so difficult and so interesting in the same time. I told myself: you will do it (learn bridge). And I did."*; *"I like puzzles of all kind. Sudoku, crosswords... but bridge is different. It is competition, you go to club. You win against someone – not yourself (laugh)."*

Quality of life

Participants agreed to have rather high overall quality of life (*"I'm not complaining, I have almost everything I could wish for."*), except some reported health related problems and dissatisfaction with Croatian government and social-economic situation in the country (*"My life is good. But what about these kids? What prospects they have in Croatia in these days?"*). Typical answers were age-related: *"For my age, I feel fine. Yes, there are those (health) problems, but all in all, I am satisfied with my life, I have all I need."*

These findings are in accordance with McDonnell, Punch, and Small (2017) research who reported that bridge players were satisfied with the way their lives have turned out, sociable, unencumbered by money concerns and in control of their own lives, showing high level of well-being and optimism.

All participants agreed that bridge contributed to the quality of their lives. For some of them, bridge was the most important thing and would do practically anything to maintain this activity: *"Of course I would leave him (partner) if he wouldn't support my bridge. In this age, you have to be practical. But, he knows bridge means a lot to me."*; *"Bridge significantly improves quality of my life. And I think it is the same for all of us. We feel good and accepted here."*

Even for those who had other hobbies it was difficult for them to imagine life without bridge: *"I have other hobbies, but I can't imagine my life without bridge. Because it is people and play, and tournaments. It is interesting in so many ways. If there was no bridge, I would play something else, as similar to bridge as possible."*

Similar to the findings of Scott and Godbey (1994), our participants described bridge as the best game of all. According to Stebbins (2007), amateurs who participate in serious leisure activity identify strongly with their pursuits, persevere and overcome difficulties, develop special skills, gain knowledge and experience durable benefits. In the following sections we will analyse self-reported benefits our participants gained from playing bridge.

Social affiliation

All participants reported that social contacts are important part of their bridge games. Indeed, social affiliation was the most obvious benefit. For most of them it is an opportunity to socialize with friends and acquaintances, and to meet new people: *“You have to talk. It is very social. Some pretend to be serious, but it is a game, isn’t it?”*; *“I like to chat with opponents. I don’t like serious tournaments. It is all fun to me. I don’t understand why people get upset.”*. Bridge seems to have entertainment function, and some of the participants perceive it as “going out”: *“I never go to bars, but at the club I have a drink or two, it is like going out.”*.

Bridge clubs create safe environment where people can encounter others and start conversations and fulfil their communication needs, without fear of being rejected: *“There are lot of people in a bridge club. I like chatting to different people. I can’t go around and talk to people on the streets, or approach someone in the coffee-shop. That would be weird. I like the fact that everyone knows me here.”*.

Moreover, for some of our participants going to bridge clubs facilitated communication and interest in social relationships: *“On Wednesdays me and (name) go to different clubs. As soon as we come home we talk on phone for at least half an hour. About bridge hands if we remember. And gossip (laugh).”*.

Dergance et al. (2003) found that leisure activity provides an opportunity for older people to meet new people and build a significant relationship. Our participants didn’t report any close friendships arose from bridge sessions, but they stressed the importance of casual communication and socialization. This social dimension is not in accordance with findings of Scott and Godbey (1994) who reported that tournament players in their research did not regard friendship as integral to their bridge involvement. Scott and Godbey (1992) distinguished between social (home games) and serious (competitive) bridge. Since all of our participants regularly played in organized club tournaments, they would all fit in category of serious players. However, social affiliation was one of commonly perceived benefits among our participants. These discrepancies could be attached to older age of our participants, but its more probable result of socio-cultural differences, since in another research in Croatia, Brkljačić, Sučić and Lučić (2017, in press) got similar findings on much younger sample.

Regarding social affiliation we also found examples of mutual support and understanding. Seniors were especially satisfied with the fact that they had chance to communicate with youngsters: *“Most of the kids at bridge behave very nice. They respect me.”*; *“Oh, no, I don’t mind when they (youth) call*

me by my first name. I feel younger.”. Also, they like to be involved into charity club work and think that those events build bonds among generations: *“Last year we were playing some tournaments to collect money for the juniors. Later, one of them, during the club game said me (after I made insufficient bid): it is not problem, just bid what you wish. I don’t know, but I think we are kind of closer now. We help each other.”*

Finally, for some of the participants bridge provided benefits related to status and social recognition outside bridge community. For example, one participants agreed: *“Yes, I think people think you are smarter when you say that you play bridge.”* and the other commented: *“You know, it is nice to say... I can’t (go somewhere) because I have to go to bridge. It is nice that you have any plans, and even better if they sound so good. I feel important. (Giggles)”*.

Sense of accomplishment

For our participants challenge, competition, and mastery were important part of the game. For example, one of the participants compared himself to the other player: *“Did you see how good I am? I check ranking list every day. I am even better then (name), and he thinks he is an expert.”*. The other participant stressed the importance of good performance and winning: *“Winning is very important to me. I am proud of myself when I do well. But, my play is much more important to me, than what partner does.”*. Finally, one of the participants described how he feels bad about himself when he fails to play well: *“When I make mistake I want to kill myself. How could I be so stupid? Oh, yes, I am proud of myself when I make a contract that others didn’t.”*

But, even more than competing and winning, the feeling of learning and improving was central to our participants. Some of them found in bridge compensation for other mental activities they did before: *“Always in my life I was active. Because of bridge I can still be active and learn new things.”*; *“After I got retired I had to do something, friend told me about bridge. I never regretted. I put a lot of effort into it, and I know I learned a lot. I feel good about it.”*. One of the participants explained why bridge is so interesting: *„You can study bridge forever, you will never know it all. That is why I love it.”*

Health: staying intellectually fit

All participants confirmed that they are in a good intellectual shape: *“Luckily, my brains still works fine.”* or *“I may not be as fast as I was thirty years ago, but I am not senile, I don’t forget things like some other old people.”*. However, without being explicitly asked, only two mentioned bridge as a form of mental fitness: *“Bridge keeps me moving. I exercise my brain. All my life I liked puz-*

zles. *Bridge is the best game of all.*”; *“I feel my brain works when I play bridge.”*. These findings are in line with previous research (Ashworth et al., 2016; Graham & Punch, 2016) on its role in delaying the onset and reducing the severity of dementia.

However, once directly asked, all agreed that bridge helps them in preserving “clear” mind, as one participant pointed out: *“I believe bridge is very good brain training.”*, while the other compared it to thrillers: *“I never watched Spanish or Turkish soap-operas. I like thrillers. Bridge is similar to that – you have to find a clue. It is good for my brain. (laugh)”*. These findings are in line with Naylor et al. (2000) who reported about an intervention that combined structured social activity with light intensity exercise (e.g., card games, croquet) significantly improved older adults’ memory function and sleep.

Wilson et al. (2002) found that elderly persons, who had participated to a greater extent in leisure activities, had a lower risk of dementia than those who had participated to a lesser extent. However, an alternative explanation is possible since in most types of dementia, there is a long period of cognitive decline preceding diagnosis (e.g. Elias et al., 2000). Therefore, reduced participation in activities during this preclinical phase of dementia may be the consequence of already present (but not diagnosed) cognitive decline. Or participants argue that active engagement in bridge reflects in intellectual shape that is obvious in other life domains. For example, one participant provided an illustrative example on relation of bridge and mental health: *“I can see, during the holidays, when I don’t play bridge, my mind is slower... I start to forget things, I can’t remember things from shopping list. (...) Although I solve cross-words... bridge is much better exercise!”*. The other participant compared her physical and cognitive shape: *“You will see once you get old, there are not many challenges. Oh yes, you cook, and help with grandchildren. They say grandchildren keep you young. They don’t. You feel old when you have to run after them and you start wheezing (laugh). But, when you play bridge it doesn’t ask for anything you can’t do. You are as good as you were before. Or, at least I feel like that. (laugh)”*.

Coleman and Iso-Ahola (1993) argued that leisure activities with others might provide social support and, in turn, mediate the stress-health relationship, while Pressman et al. (2009) found that leisure activities help in stress recovery and restoration of social and physical resources. Only one participant related bridge to stress reduction and relaxation: *“I relax at bridge, I don’t think about daily problems.”*. This citation goes in line with Newman et al. (2014) concept of detachment-recovery in DRAMMA model of leisure activities. Most of the others associated it with competition and

arousal: *“If I wanted to be passive and relax I would watch TV, or go walking or play Pasians. Bridge is dynamic, and fast, and hectic sometimes (...) That is why I like it!”*

When we asked participants if one of the reasons to play bridge is to stay mentally fit, they said that it is a good reason, but that they wouldn't do it if bridge wasn't so interesting. So, it seems that our participants are aware that bridge is good for their intellectual form, but it is rather positive side effect, than the motive to play.

Providing structure in daily activities

One of the life changes that occur after the retirement is drop of structure in daily activities. While employed people have work-related structure, pensioners often lack this schedule, which may lead to feeling of disorientation and emptiness. This benefit was found in almost all participants, although it doesn't fit into Major's (2001) or Newman et al. (2014) model. However, this finding is not surprising since neither of these models are developed for seniors, but general population. Playing organized bridge was found to be integrated into weekly routine of our participants, and it seems they organize their other activities around it (e.g. *“That's what I do on Thursdays. I look forward to it the whole week. I organize my life accordingly.”* or *“I have to get out of the house. I will never quit bridge and smoking. I can't walk, I come by taxi. But I don't mind to spend on what I like.”*).

Moreover, bridge was perceived as a constant, an anchor, which is especially important in transition periods of life, such as retirement, where life circumstances change: *“Bridge is stable thing in my life for over 30 years. Whatever I'm going through there is always bridge... sometimes it is more important, sometimes it is in the background, but I can always go to a bridge club and meet some friends there.”*

Study contributions, future directions and limitations

This study is among the first to explore the relationship between well-being and senior engagement in intellectual games. While there are lot of research on various video and online games, traditional games, such as bridge or chess, and their possible effects on well-being of elderly seems to be undervalued. Video games proved to be beneficial for well-being, and could enchase psychomotor and cognitive functioning. However, they lack social contact and structured time-schedule, which are important conditions of well-being. Findings of this study suggest that serious involvement in intellectually challenging games could provide various benefits for the elderly.

Traditionally, games are presumed to be kids' or youth's activity, so seniors might be reluctant to take bridge lessons, but rather choose some "age-more-appropriate" entertainment. Additionally, as we already mentioned, bridge is not an easy game to learn. However, there is significant evidence, including this paper, that it is very enjoyable activity, and that it could be learned in advanced age. Findings of this study suggest that seniors who did intellectually challenging jobs in their younger age, as well as those who enjoyed solving puzzles of any kind and competition, are likely to appreciate game of bridge.

Although most of the participants took bridge because of its mind-stimulating features, social dimension can't be ignored. Social disengagement has been suggested as a possible risk factor for cognitive decline in elderly persons (e.g. Bassuk, Glass, & Berkman, 1999).

This study had some limitation, mostly related to the sample. Although we conducted additional interview proving that new themes or ideas didn't appear, we are aware that we limited our sample only to those who have played bridge for over five years, and only in Zagreb. Therefore, our sample was rather homogenised, and didn't allow us to analyse thoughts of players who recently took bridge or to compare those who preserved in bridge and those who gave up after initial course.

Conclusion

Bridge contributed to well-being of elderly by advancing social affiliation (communicating with people of all ages, finding new friends, getting social support, recognition and status, and going out of home), enhancing sense of accomplishment (learning new things, solving problems, competing, advancing, and winning) and providing mental fitness (staying intellectually fit, learning new things, improving logical reasoning). Apart from these benefits, our participants also profited from structuring time around bridge.

Seniors decided to take bridge and not some other activity mostly because they knew it was intellectually challenging. However, staying intellectually fit is not primary reason for playing bridge, but rather side-effect of the activity they engage in because they find it intriguing, social and competitive.

Bibliography

- Adams K. B., Leibbrandt S., Moon H. (2011), *A critical review of the literature on social and leisure activity and wellbeing in later life*, „Ageing & Society”, 31(4), p. 683–712, doi:10.1017/S0144686X10001091.
- Ashworth R., Punch S., Small, C. (2016), *A review of possible interventions into healthy ageing and cognitive stimulation: Exploring the links between bridge and dementia*, Aylesbury: English Bridge Education & Development (EBED).
- Bassuk S. S., Glass T. A., Berkman, L. F. (1999), *Social disengagement and incident cognitive decline in community-dwelling elderly persons*, „Annals of internal medicine”, 131(3), p. 165–173.
- Blace N. P. (2012), *Functional ability, participation in activities, and life satisfaction of the older people*, Canadian Center of Science and Education, 8(3), p. 75–87.
- Blanchflower D. G., Oswald, A. J. (2008), *Is well-being U-shaped over the life cycle?*, „Social Science & Medicine”, 66(8), p. 1733–1749.
- Caillois R. (1961), *Man, play, and games*, New York: Free Press.
- Cohen S. (2004), *Social relationships and health*, „American Psychologist”, 59(8), p. 676–684, doi:10.1037/0003-066X.59.8.676.
- Coleman D., Iso-Ahola, S. E. (1993), *Leisure and health: The role of social support and self-determination*, „Journal of Leisure Research”, 25(2), p. 111–128.
- Coyle J. T. (2003), *Use it or lose it—Do effortful mental activities protect against dementia?*, „New England Journal of Medicine”, 348(25), p. 2489–2490.
- Dergance J. M., Calmbach W. L., Dhanda R., Miles T. P., Hazuda H. P., Mouton C. P. (2003), *Barriers to and benefits of leisure time physical activity in the elderly: Differences across cultures*, „Journal of the American Geriatrics Society”, 51(6), p. 863–868.
- Diamond M. C., Weidner J., Schow P., Grell S., Everett, M. (2001), *Mental stimulation increases circulating CD4-positive T lymphocytes: A preliminary study*, „Cognitive brain research”, 12(2), p. 329–331.
- Diener E. (2006), *Guidelines for national indicators of subjective well-being and ill-being*, „Journal of Happiness Studies”, 7(4), p. 397–404.
- Diener, E., Suh, M. E. (1997), *Subjective well-being and age: An international analysis*, In: K. W. Schaie, M. P. Lawton (Eds.), *Annual Review of Gerontology and Geriatrics* (pp. 304–324), New York: Springer.
- Elias M. F., Beiser A., Wolf P. A., Au R., White R. F., D’Agostino R. B. (2000), *The preclinical phase of Alzheimer disease: A 22-year prospective study of the Framingham Cohort*, „Archives of Neurology”, 57(6), p. 808–813.
- Fredrickson B. L. (2000), *Cultivating positive emotions to optimize health and well-being*, „Prevention & Treatment”, 3(1).
- Graham E., Punch, S. (2016), *Gender Inequalities and the Sociology of Bridge*, Paper presented at Centre for Research on Families and Relationships Conference, University of Edinburgh.

- Jang Y., Mortimer J. A., Haley W. E., Graves, A. R. B. (2004), *The role of social engagement in life satisfaction: Its significance among older individuals with disease and disability*, „Journal of Applied Gerontology”, 23(3), p. 266–278.
- Juan H. (2009), *A study of leisure activities for retired elderly people in Nantou*, Unpublished Dissertation, Nan Kai University of Technology, Taiwan.
- Jung Y., Li K. J., Janissa N. S., Gladys W. L. C., Lee K. M. (2009), *Games for a better life: Effects of playing wiigames on the well-being of seniors in a long-term care facility*, Proceedings of the 6th Australasian Conference on Interactive Entertainment, 5. doi:10.1145/1746050.1746055
- Kelly J. (1996), *Leisure*, Boston: Allyn & Bacon.
- Kleiber D., Nimrod, G. (2009), *'I can't be very sad': Constraint and adaptation in the leisure of a 'learning in retirement' group*, „Leisure Studies”, 28(1), p. 67–83. doi:10.1080/02614360802260820
- Major W. F. (2001), *The benefits and costs of serious running*, World Leisure Journal, 43(2), p. 12–25.
- McDonnell D., Punch S., Small C. (2017), *Individual wellbeing and bridge: An empirical analysis*, Aylesbury: English Bridge Education & Development (EBED).
- Naylor E., Penev P. D., Orbeta L., Janssen I., Ortiz R., Coleccia E. F., Zee P. C. (2000), *Daily social and physical activity increases slow-wave sleep and daytime neuropsychological performance in the elderly*, Sleep, 23(1), p. 1–9.
- Newman D. B., Tay L., Diener, E. (2014), *Leisure and subjective well-being: A model of psychological mechanisms as mediating factors*, „Journal of Happiness Studies”, 15(3), p. 555–578.
- Nilsson I., Fisher A. G. (2006), *Evaluating leisure activities in the oldest old*, „Scandinavian Journal of Occupational Therapy”, 13(1), p. 31–37.
- Paillard-Borg S., Wang H. X., Winblad B., Fratiglioni, L. (2009), *Pattern of participation in leisure activities among older people in relation to their health conditions and contextual factors: A survey in a Swedish urban area*, „Ageing & Society”, 29(5), p. 803–821. doi: <https://doi.org/10.1017/s0144686x08008337>.
- Peel E. (2014), *'The living death of Alzheimer's' versus 'take a walk to keep dementia at bay': Representations of dementia in print media and carer discourse*, „Sociology of Health and Illness”, 36(6), p. 885–901.
- Pressman S., Matthews K. A., Cohen S., Martire L. M., Scheier M., Baum A., Schulz R. (2009), *Association of enjoyable leisure activities with psychological and physical well-being*, „Psychosomatic Medicine”, 71(7), p. 725–732. doi:<https://doi.org/10.1097/psy.0b013e3181ad7978>.
- Scott D., Godbey G. (1992), *An analysis of adult play groups: Social versus serious participation in contract bridge*, „Leisure Sciences”, 14(1), p. 47–67. doi: <https://doi.org/10.1080/01490409209513156>.
- Scott D., Godbey, G. (1994), *Recreation specialization in the social world of contract bridge*, „Journal of Leisure Research”, 26(3), p. 275–295.

- Silverstein M., Parker, M. G. (2002), *Leisure activities and quality of life among the oldest old in Sweden*, *Research on Aging*, 24(5), 528–547. doi:10.1177/0164027502245003
- Stebbins R. (1992), *Amateurs, professionals, and serious leisure*, Montreal: McGill-Queen's University Press.
- Stebbins R. A. (2002), *Organizational basis of leisure participation: A motivational exploration*, State College, Pa.: Venture Publishing.
- Stebbins R.A. (2007), *Serious Leisure: A Perspective for Our Time*, New Brunswick: Transaction.
- Vergheze J., Wang C., Katz M. J., Sanders A., Lipton R. B. (2009), *Leisure activities and risk of vascular cognitive impairment in older adults*, „*Journal of Geriatric Psychiatry and Neurology*”, 22(2), p. 110–118.
- Wilson R. S., De Leon C. F. M., Barnes L. L., Schneider J. A., Bienias J. L., Evans D. A., Bennett D. A. (2002), *Participation in cognitively stimulating activities and risk of incident Alzheimer disease*, „*Jama*”, 287(6), p. 742–748.
- Yarnal C. M., Chick G., Kerstetter D. L. (2008), *“I did not have time to play growing up... so this is my play time. It's the best thing I have ever done for myself”: What is play to older women?*, „*Leisure Sciences*”, 30(3), p. 235–252.